

Saving Water?

Annual Water Quality Report *2008*



1. A REMINDER TO ALWAYS USE WATER WISELY

For the third year in a row, California is experiencing below normal rainfall and many of the State's water reservoirs are at very low water levels. In addition, court-ordered pumping restrictions on water being provided from the Sacramento/San Joaquin Delta have significantly cut water deliveries from the State Water Project (SWP) into the Tri-Valley area this year and these cuts may continue past 2009. As a result, on Feb 27, 2009, Governor Schwarzenegger issued a water shortage proclamation requesting Californians reduce their water use by 20 percent along with promoting other water conservation actions.

This year's Annual Water Quality Report cover is a reminder to the City's water customers of the need to conserve water and to always use water wisely. The cover pictures also depict the significant water use savings that can be achieved by using efficient landscape irrigation systems and other water conserving practices.

One of the most significant areas of water use for most homes and businesses is water used outside for landscape irrigation. Landscape irrigation water use in Pleasanton represents approximately 30 percent of the City's total annual water demand, increasing to over 50 percent of the total water demand during the hot summer months.

There are many simple and cost-effective measures that City water customers can

take to help reduce their outside irrigation water use. Turn your landscape irrigation controller off during the cold and rainy winter months. Keeping turf grasses mowed to a height between 2½ to 3 inches tall helps lower evaporation and promotes lawn root growth. Turf grasses can usually do fine when watered every second or third day, rather than every day. Water your outside landscaping only between the hours of 10:00 p.m. and 6:00 a.m. Replacing damaged, bent and poorly spraying sprinkler heads and drip irrigation emitters can help. Also, consider replacing some of your turf areas with drought-tolerant plants.

Recent designs of spray sprinkler heads have also made these much more efficient and can help deliver water to your landscaping without overspray, misting, etc. A small investment in changing the high water emitting spray heads or bubblers in plant and shrub areas with an efficient drip irrigation system could also save water and deliver water only to the plants' roots for a healthier landscape. Utilizing mulch and bark around plants, shrubs and trees can also help by reducing evaporation of water, help mitigate weed growth, and result in healthier plants. More advanced irrigation controllers are now equipped with moisture sensor modules to help adjust the amount and duration of water being applied to plants and turf. Knowing how to operate an irrigation controller and effectively maintaining your sprinkler system can make a big difference in your outdoor water use and greatly help your water conservation efforts.

To learn more water conservation tips and to tap into more water conservation information to reduce water use both inside and outside your home or business, please visit the City's website at www.ci.pleasanton.ca.us/services/utility/water-conservation.html.

2. PLEASANTON'S WATER SOURCES

Zone 7, the Valley's water wholesaler, provides treated water to four major Valley water retailers, untreated water to a number of agricultural customers, and flood control and groundwater management in the Tri-Valley area. About 80% of Pleasanton's water is purchased from Zone 7 and is treated surface water blended with some local groundwater. The remaining 20% comes from local groundwater pumped from wells owned and operated by the City.

Imported Surface Water

The State Water Project (SWP) delivers water to Zone 7. The SWP water originates from the Feather River watershed, where it is stored be-

hind the Oroville Dam before being released into the Sacramento River/San Joaquin Delta. This water is pumped from the Delta by the State Department of Water Resource (SDWR) to the South Bay Aqueduct (SBA) system, which then flows to the Tri-Valley area. The SBA continues through Alameda County and into Santa Clara County.

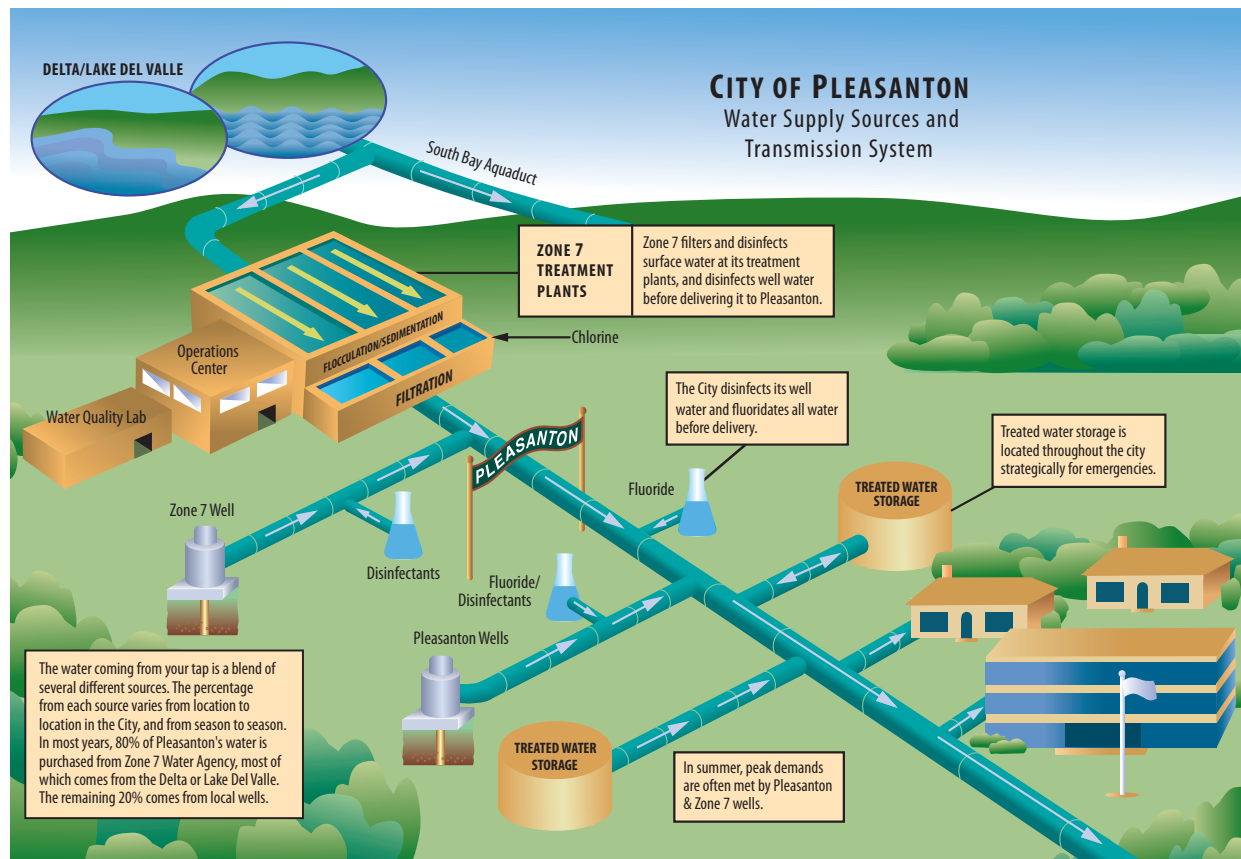
Local Surface Water

Lake Del Valle, our local water storage reservoir, is owned and operated by the State DWR as a water supply reservoir and also provides local flood control and recreation. The water stored at Lake Del Valle comes from local rainfall and from the SWP. Zone 7 treats all water from Lake Del Valle and the SBA prior to distributing this water to its retailers. Water from Zone 7's two water treat-

ment plants (Del Valle and Patterson Pass) undergoes several stages of treatment, complying with strict California Department of Public Health (CDPH) regulations. Following the treatment process, the water is disinfected and delivered to the City and other Valley water retailers.

Local Groundwater

Groundwater comes from wells and springs. Both the City and Zone 7 use the local groundwater to increase the volume of drinking water available, generally during the hot summer months, when demand for water rises. On any given summer day, over half of the water being delivered in the City may be groundwater. As noted, City water sources are both fluoridated and disinfected before being delivered to customers' tap.



3. YOUR WATER MEETS ALL SAFE DRINKING WATER STANDARDS

The technical and analytical water quality information presented in this report is required by State health regulations. These regulations require water suppliers to inform customers about where their water comes from; what is in their water; and any violation of safe drinking water standards that may have occurred during this past reporting period. This report provides results of all tests required to be performed on Pleasanton's water supplies during 2008. We are happy to report that all 2008 water quality tests confirmed that water delivered to your tap met all applicable federal and state drinking water standards without any violations.

This report also includes information regarding steps taken by the City and Zone 7 to improve drinking water delivered to customers in 2008, and opportunities for the public to participate in decisions that affect their drinking water quality. Phone numbers and web page addresses of the City and other public agencies responsible for water billing, delivery, supply, and water quality are also presented herein.



This report contains important information about your drinking water. Translate it, or speak with someone who understands it.

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.

此份有關你的食水報告，內有重要資料和訊息，請找他人為你翻譯及解釋清楚。

यह सूचना महत्वपूर्ण है ।
कृपा करके किसी से :सका अनुवाद कराये ।

이 안내는 매우 중요합니다.
을 위해 번역인을 사용하십시오.

Mahalaga ang impormasyong ito. Mangyaring ipasalin ito.

Included in this report:

1. A Reminder to Always Use Water Wisely
2. Pleasanton's Water Sources
3. Safe Drinking Water Standards
4. Pleasanton's Water Quality
5. Chemicals & Minerals in Your Drinking Water
6. Definition of Terms
7. Understanding the Summary
8. 2008 Water Quality Results
9. Public Involvement & Contact Information

9. PUBLIC INVOLVEMENT

Zone 7, the Valley's water wholesaler, and the City of Pleasanton encourage citizens who would like to become involved in local water issues and water quality topics to attend Zone 7's regular board meetings, which are held the third Wednesday of each month at 7:00 p.m. at the Zone 7 offices in Livermore at 100 North Canyons Parkway. These meetings are open to the public. Agendas and other pertinent information on these meetings are available on the Zone 7 web site at www.zone7water.com. For further assistance, please refer to the contact information below:

Contact Information:

Water Quality Information 925-931-5510

M-F 7:00 AM-3:30 PM

scclough@ci.pleasanton.ca.us

Para información en español, llamar al telefono: 925-931-5500

Utility Billing Information/Water Conservation 925-931-5425/

Material & Programs 925-931-5500

M-F 7:30 AM-5:30 PM

Emergency Water Service 925-931-5500

M-F 7:00 AM-3:30 PM

Or after hours and weekends,
call Pleasanton Police Dispatch: 925-931-5100

Zone 7 Water Agency 925-454-5000

M-F 8:00 AM-5:00 PM

www.zone7water.com

Household Hazardous Waste Collection Sites 510-670-6460

M-F 8:30 AM-5:00 PM

www.household-hazwaste.org

EPA Safe Drinking Water Hotline 1-800-426-4791

www.epa.gov/safewater/hfacts.html

EPA's Radon Hotline 1-800-767-7236

www.epa.gov/radon

To view the Water Quality Report online, please
visit www.ci.pleasanton.ca.us/pdf/awqr08.pdf

Saving Water Saves Money!

Households can save hundreds of dollars a year on utility and water bills by using energy-efficient appliances or by simply using existing appliances more efficiently.



For any further questions you may have regarding the City's water supplies or quality, you can contact us by visiting the City's web site at www.ci.pleasanton.ca.us.

Printed on recycled paper using soy-based inks

4. WATER QUALITY IS OUR TOP PRIORITY

The City of Pleasanton is pleased to distribute this report to its water customers. It provides important information about where your water comes from and the work we perform each day to assure the water delivered to your tap is safe to drink. It also provides data about what is in your water and how water quality tests on your drinking water compare to federal and state drinking water standards during calendar year 2008.

Pleasanton's Water Quality Goal

The City's goal is to continuously provide a dependable supply of high quality drinking water to its customers. To accomplish this, the treated surface water delivered to customers is continuously monitored at Zone 7's two local water treatment plants. These plants also perform specific chemical and biological tests every four hours to check the purification process. In addition, there are 48 sampling points located throughout the City's water distribution system that are monitored and tested daily, weekly and monthly by the City, to assure your drinking water continuously complies with all federal and state drinking water standards. If you have questions regarding the quality of the water supplied to you by the City, this report should provide most of the answers. We appreciate the time you take to read this report and welcome any additional question or comment you may have regarding your water supply. For further information on Pleasanton's water quality

or supplies, call the City's Water Quality Lab at 925-931-5510, or email your questions to us through the City's web page at www.ci.pleasanton.ca.us.

5. CHEMICALS & MINERALS IN WATER

The sources of most drinking water (both tap and bottled water) in this country include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the land surface or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances that result from the presence of animals or human activity. Drinking water, including many bottled waters, may reasonably be expected to contain at least

small amounts of some minerals or contaminants. The presence of these contaminants does not necessarily indicate that the drinking water poses a health risk, especially

at low levels. More information about contaminants and potential health effects can be obtained by calling the USEPA Safe Drinking Water Hotline (800-426-4791). The disinfectant, Chloramine (a combination of chlorine and ammonia), is used to disinfect both Zone 7 and the City's water. This

disinfectant is utilized to protect public health by destroying disease-causing organisms that may be present in water supplies. Chloramines, at the low levels used, will not cause any health problems for the general public. However, aquarium owners and home dialysis patients must take special precautions before chloraminated water can be used in aquariums or home kidney dialysis machines, due to the very small amount of ammonia present in the water.

Important Health

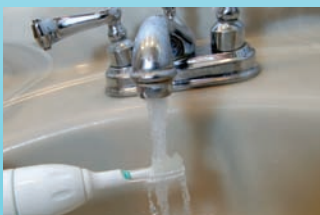
Information

Some people may be more vulnerable to contaminants in drinking water than the general population. These include immuno-compromised people such as

persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly people, and infants.

These people may be at additional risk from infections and should seek advice about their drinking water from their physicians. The USEPA/ Centers for Disease Control (CDC) guidelines on

appropriate ways to reduce the risk of infection by Cryptosporidium and other microscopic contaminants are available from the United States Environmental Protection Agency's (USEPA) Safe Drinking Water Hotline — 800-426-4791.



6. DEFINITION OF TERMS

The following terms are used in the water industry to define contaminant levels. Pleasanton's drinking water is tested at the levels in the table to the right.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of water of a contaminant in drinking water below which there is no known or expected risk to health—set by the USEPA.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant that is allowed in drinking water.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a disinfectant in drinking water below which there is no known or expected risk to health.

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California EPA.

Primary Drinking Water Standard (PDWS): MCLs for contaminants that affect health, along with their monitoring, reporting, and water treatment requirements.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Regulatory Action Level (AL): The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

Turbidity: A measure of the cloudiness of the water. We monitor turbidity since it is a good indicator of the effectiveness of the treatment plant's filtration system.

The following contaminants may also be found in drinking water:

TTHMs (Total Trihalomethanes): TTHMs are by-products of drinking water disinfected with chlorine compounds. Some people who use water containing TTHMs in excess of the MCL, over many years, may experience liver, kidney, or central nervous system problems and may have an increased risk of getting cancer. Pleasanton's water sources are below the MCLs for TTHMs.

MTBE (Methyl Tertiary Butyl Ether): Pleasanton's well water sources were monitored for MTBE in 2005 and 2008, and it was not detected (next monitoring in 2011). Zone 7's sources were monitored twice in 2008. The current detection limit for reporting purposes is 3 parts per billion (ppb). MTBE was not detected in any of Zone 7's sources in the past year.

Radon: A radioactive gas found throughout the United States that you cannot see, taste, or smell. Currently, there is no federal regulation on radon levels in drinking water. The California Department of Public Health is awaiting action by the USEPA on a proposed radon level in drinking water. For additional information, call your State Radon Program at 1-800-745-7236 or call EPA's Radon Hotline at 1-800-767-7236.

Key to Tables

AL	Action Level
MCL/MCLG	Maximum Contaminant Level/Maximum Contaminant Level Goal
DLR	Detection Limit for Purpose of Reporting (CDPH established)
SMCL	Secondary Maximum Contaminant Level
MRDL/MRDLG	Max. Residual Disinfectant Level/Max. Residual Disinfection Level Goal
MRL	Minimum Reporting Limit
PHG	Public Health Goal
pCi/L	Picocuries per Liter
mg/L	Milograms per Liter or parts per million
µg/L	Micrograms per Liter or parts per billion
ng/L	Nanograms per Liter or parts per trillion
NA	Not Applicable
NL	Notification Level
ND	Monitored for but not detected at or above DLR or MRL. ND or value in the range column indicates that more than one analysis performed
TT	Treatment Technique
NTU	Nephelometric Turbidity Units
umhos/cm	A measure of specific conductance

7. UNDERSTANDING THE SUMMARY

There are two types of standards that are regulated in drinking water: **Primary Standards** are set after considerable research and data have been analyzed by health experts. These standards, called **Maximum Contaminant Levels (MCLs)** are set by USEPA and strictly enforced by the California Department of Public Health (CDPH).

Secondary Standards are based upon qualities of water such as taste, odor, color or clarity of the water. These standards set limits on substances that may influence customer acceptance of the water and are established by the CDPH.

Detected Contaminants: The table at right shows the level of each detected regulated contaminant, the average level of each detected contaminant (Average), and, if more than one sample was collected, the range of levels found during the 2008 calendar year (Range).

In addition to the regulated contaminants, Zone 7 and the City monitor a large number of additional "unregulated contaminants". Unregulated contaminant monitoring helps EPA and CDPH to determine where certain contaminants occur and whether the contaminants need to be regulated in the future. The unregulated organic compounds are monitored on the same schedule as the regulated contaminants. All the additional unregulated organic compounds the City tested for during 2008 were not detected (ND).

Sources of Contaminants: In order to ensure that tap water is safe to drink, USEPA and the CDPH prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The limits for contaminants in bottled water provide the same level of protection.

Contaminants that may be present in source water include the following: microbial contaminants, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and herbicides may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

Radioactive contaminants can be naturally occurring or be the result of oil and gas production and mining activities.

Sampling Frequency: Pleasanton sampling frequency meets, and for some parameters, is more frequent than CDPH requirements. CDPH allows monitoring for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Hence, some of our data, though representative, may have been sampled prior to 2008.

A Drinking Water Source Assessment and Protection Program (DWSAP) was conducted for the City of Pleasanton Wells #5, #6 and #8 in December 2002. No contaminants have been detected in the City's groundwater supply. However, all groundwater sources are considered vulnerable to activities located near the drinking water supply source. DWSAP is updated whenever new water sources are added. A completed copy of the assessment may be viewed at the City Clerk Office, 123 Main Street, Pleasanton.

8. 2008 WATER QUALITY RESULTS

The following is a list of contaminants that may be found in drinking water and their sources. Also included in the table below is a summary of all chemical analyses required by the USEPA and CDPH for Pleasanton's water supply during calendar year 2008.¹

PRIMARY STANDARDS—Mandatory Health-Related Standards, established by the State of California Department of Public Health Distribution System Sampling Results									
Contaminant	MCL	PHG MCLG* MRDLG**	Zone 7 Water Agency ²			City of Pleasanton ³			Sources
			Highest Running Annual Average	Range of Individual Samples		Highest Running Annual Average	Range of Individual Samples		
Total Trihalomethanes (TTHMs) (µg/L)	80	NA	38	ND–47		33	ND–170		By-product of drinking water chlorination
Haloacetic Acids (HAA5) (µg/L)	60	NA	17	ND–33		16	ND–59		By-product of drinking water chlorination
			Highest % of Monthly Positive Samples			Highest % of Monthly Positive Samples			
Total Coliform Bacteria	More than 5% of monthly samples are positive	0*	0.0%			0.84%			Naturally present in the environment
Chloramines as Chlorine (mg/L)	Maximum Residual Disinfectant Level (MRDL)=4.0	4**	Running Annual Average (RAA) 2.3	Range of Monthly Avg. Chloramines 2.2–2.4		Running Annual Average (RAA) 1.79	Range of Monthly Avg. Chloramines 1.59–2.09	No. of Samples > Action Level	Drinking water disinfectant added for treatment
EPA/State Lead Copper Rule—Monitored at Customers Tap—2007 ⁴						No. Collected	90th Percentile		
Lead (µg/L)	AL=15	2				44	ND	0	Internal corrosion of household plumbing
Copper (mg/L)	AL=1.3	0.3				44	0.08	0	Internal corrosion of household plumbing
Water Supply Sources									
Contaminant	MCL	PHG MCLG*	Treated Surface Water		Groundwater		Groundwater		
					Average	Range of Individual Samples	Average	Range of Individual Samples	
Turbidity	TT=1 NTU Maximum	NA	Highest Level Found=0.14NTU		0.06	0.05–0.16	0.17	0.15–0.20	
	TT=95% of Samples ≤ 0.3 NTU	NA	% of Samples ≤ 0.3 NTU=100		Not Applicable		Not Applicable		Soil runoff
Total Organic Carbon (mg/L)	TT=Quarterly RAA Removal Ratio ≥ 1.0	NA	Lowest Quarterly RAA Ratio=1.5		Not Applicable		Not Applicable		Runoff/leaching from natural deposits
Inorganic Chemicals			Average	Range	Average	Range	Average	Range	
Arsenic (µg/L)	10	.004	ND	ND	ND	ND-2	ND	ND	Erosion of natural deposits
Barium (µg/L)	1000	2000	ND	ND	200	120–390	217	180–270	Erosion of natural deposits
Chromium (µg/L)	50	100*	ND	ND	ND	ND–10	ND	ND	Erosion of natural deposits
Selenium (µg/L)	50	50*	ND	ND	ND	ND–11	ND	ND	Erosion of natural deposits
Fluoride (mg/L) (Naturally Occurring) ⁵	2	1	0.1	0.1	0.1	0.1–0.2	0.11	0.1–0.13	Erosion of natural deposits
Nitrate (as NO3) (mg/L)	45	45	2.6	ND–8.0	18	11–35	14	9–18	Erosion of natural deposits
Nitrate + Nitrite as N (mg/L)	10	10	NA	NA	NA	NA	3	2–4	Erosion of natural deposits
Regulated Contaminants with Secondary MCLs, established by the State of California Department of Public Health									
Manganese (µg/L)	50	--	ND	ND–52	ND	ND	NA	NA	Runoff/leaching from natural deposits
Odor (TON—Threshold Odor Number)	3	--	ND	ND–1	ND	ND–1	1	1–2	Naturally occurring organic materials
Conductivity (umhos/cm)	1600	--	597	391–751	889	615–1492	848	684–975	Substances that form ions in water
Chloride (mg/L)	500	--	103	39-150	78	40–182	73	56–83	Naturally occurring organic materials
Sulfate (mg/L)	500	--	40	18–72	58	32–111	50	43–55	Runoff/leaching from natural deposits
Total Dissolved Solids (mg/L)	1000	--	331	212–420	565	379–990	562	484–614	Runoff/leaching from natural deposits
Unregulated Contaminants Requiring Monitoring, established by the State of California Department of Public Health									
Boron (µg/L)	NL=1000	--	195	ND–360	487	260-1110	340	330–360	Runoff/leaching from natural deposits
Vanadium (µg/L)	NL=50	--	ND	ND	1	ND–5	3	ND–4	Erosion of natural deposits
Additional Parameters, included to assist consumers in making health or economic decisions, i.e. low sodium diet, water softening, etc.									
Corrosivity (Units) ⁶	--	--	12.2	11.6–12.7	12.2	12–13	13	13	Runoff/leaching from natural deposits
Alkalinity (as CaCO3)(mg/L)	--	--	86	59–146	283	217–408	218	211–233	Runoff/leaching from natural deposits
Hardness (as CaCO3)(mg/L)	--	--	119	80-158	351	239–577	357	278–415	Runoff/leaching from natural deposits
Calcium (mg/L)	--	--	25	17–34	67	43–106	80	65–92	Runoff/leaching from natural deposits
Magnesium (mg/L)	--	--	14	7–18	44	31–78	38	28-45	Runoff/leaching from natural deposits
Potassium (mg/L)	--	--	2.7	1.4–4.2	1.6	1.1–2.9	1.9	1.6–2.1	Runoff/leaching from natural deposits
Sodium (mg/L)	--	--	75	38–103	61	39–115	41	35–49	Runoff/leaching from natural deposits
pH (Units)	--	--	8.5	8.1–8.9	7.6	7.4–8.3	7.4	7.1-7.8	Runoff/leaching from natural deposits
Silica (mg/L)	--	--	12	8–17	25	21–28	NA	NA	Runoff/leaching from natural deposits
EPA UCMR 2 Unregulated Contaminated Monitoring Regulation ⁷									
N-nitrosodimethylamine (NDMA) (119/L)	Sample Site		Average (119/L)	Range (119/L)					
	Del Valle CWE		2.2	ND–6.4					
	Patterson Pass CWE		2.3	ND–5.1					
	Livermore Turnout 9		ND	ND–6.2					By-product of chlorination at treatment plants that use chloramines
	Pleasanton Carriage Dr.		ND	ND–3.3					

¹Pleasanton and Zone 7 also test for a number of additional constituents in the water supply sources. Test results for all of these constituents were non-detected and therefore not included in the table. A complete list of all constituents tested during 2008 is available upon request. ²Zone 7 Water Agency supplies surface and groundwater to the City of Pleasanton. For more information regarding this source, call 925-447-0533. ³The City of Pleasanton owns and operates three groundwater wells for drinking water purposes. For more information on this source, please call 925-931-5510. ⁴Tested every 3 years; next scheduled testing in 2010. ⁵The City treats the water delivered to your tap by adding fluoride to the naturally occurring level in order to help prevent dental caries in consumers. The fluoride levels in the treated water are maintained within a range of 0.7 to 1.3 ppm, as required by CDPH regulations. ⁶Zone 7 strives to supply non-aggressive water (corrosivity>12) by pH adjustment on surface treated water. ⁷ND—Not detected at or above 2.0 119/L. List 1 and List 2 contaminants available upon request.